

## CLAIMS

1. Particles comprising:
  - at least one active principle comprising one or more aromatic, carbocyclic or heterocyclic, monocyclic or fused polycyclic groups, with a molecular weight of less than or equal to 1000, and
  - at least one synthetic polymer comprising aryl groups, with a glass transition temperature ( $T_g$ ) of greater than or equal to 45°C.
2. The particles according to Claim 1, wherein the active principle(s) is (are) water-soluble.
3. The particles according to Claim 1, wherein the aryl groups of the synthetic polymer are phenyl or phenylene groups.
4. The particles according to Claim 1, wherein the aromatic active principle has a molecular weight of less than or equal to 500.
5. The particles according to Claim 1, wherein the aromatic active principle bears at least one ionized or ionizable group.
6. The particles according to Claim 1, wherein the weight ratio of the active principle to the aryl-containing polymer is 1/1 - 1/50.
7. The particles according to Claim 1, wherein the aromatic active principle is a cosmetic active principle.
8. The particles according to Claim 5, wherein the cosmetic active principle is a hair dye, an organic UV-screening agent or a flavonoid.

9. The particles according to Claim 1, wherein the synthetic polymer comprising aryl groups is a nonionic polymer.

5 10. The particles according to Claim 1, wherein the polymer containing aryl groups is a polyorganosiloxane comprising aryl groups linked directly to the silicon atoms of the siloxane skeleton.

10 11. The particles according to Claim 10, wherein the ratio of the number of aryl groups to the number of silicon atoms in the polymer is 1/15 - 2/1.

12. The particles according to Claim 1, wherein the  
15 synthetic polymer containing phenyl groups is a polyurethane obtained by polycondensation of:

- at least one diisocyanate, and
- at least one compound comprising two functions comprising labile hydrogen, selected from the group  
20 consisting of hydroxyl, thiol, primary amine and secondary amine functions,

the monomers being chosen such that at least one type of monomer comprises an aryl group.

25 13. The particles according to Claim 1, wherein the synthetic polymer comprising aryl groups is a polyester or polyamide obtained by polycondensation:

- of at least one diacid or of one activated derivative of a diacid, and
- 30 • respectively, of at least one diol or of at least one diamine,

the monomers being chosen such that at least one type of monomer comprises a phenyl group.

35 14. The particles according to Claim 12, wherein at least one type of monomer comprises an S-S bond.

15. The particles according to Claim 1, wherein they are microparticles with a mean size of 0.05 - 500  $\mu\text{m}$ , obtained by grinding a solid material.

5 16. The particles according to Claim 1, wherein they are microcapsules of core-shell structure with a mean size of between 0.05 and 500  $\mu\text{m}$ , obtained by multiple emulsion.

10 17. The particles according to Claim 1, wherein they are coated particles with a mean size of 0.5 - 10 mm, obtained by coextrusion.

15 18. A process for protecting or stabilizing aromatic active principles comprising incorporating a water-soluble active principle comprising one or more aromatic, carbocyclic or heterocyclic, monocyclic or fused polycyclic groups, with a molecular weight of less than or equal to 1000, into a matrix of a  
20 synthetic polymer comprising aryl groups with a glass transition temperature ( $T_g$ ) of greater than or equal to 45°C, or coating or encapsulating an active principle in a shell formed by such a polymer containing aryl groups.

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19. The process according to Claim 18, wherein it comprises:

- melting the synthetic polymer containing aryl groups,
- dissolving or finely dispersing the aromatic active  
30 principle in the molten polymer,
- allowing the mixture thus obtained to cool to room temperature, and
- grinding the solid material to a suitable particle size.

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20. The process according to Claim 18, wherein it comprises:

- dissolving the synthetic polymer containing aryl groups and the aromatic active principle in a solvent or mixture of solvents,
- evaporating off the solvent so as to obtain a solid material, and
- grinding the solid material to a suitable particle size.

21. The process according to Claim 18, wherein it further comprises a step of forming a multiple emulsion.

22. The process according to Claim 18, wherein the aromatic active principle and the synthetic polymer comprising aryl groups are co-extruded so as to obtain particles comprising a solid core formed by the aromatic water-soluble active principle, and of a solid shell formed by the synthetic polymer comprising aryl groups.

23. A composition comprising, in a cosmetically or physiologically acceptable medium, particles according to Claim 1.

24. The composition according to Claim 23, wherein the particles represent 0.1% - 95% by weight of the total composition.

25. The composition according to Claim 23, wherein the particles represent 1% - 50% by weight of the total composition.

26. The particles according to Claim 1, wherein the weight ratio of the active principle to the aryl-containing polymer is  $1/3$  -  $1/20$ .